



United States Air Force Metrology & Calibration Program

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Air Force Metrology Program

AFMETCAL Det 1



WHO WE ARE

- Air Force Metrology and Calibration Directorate.
Single Manager Program authority for all Air Force Metrology Issues.

MISSION

- Ensure accurate, reliable and safe Air, Space, Missile and Weapon System performance by ensuring system traceability to the National Institute of Standards and Technology (NIST).



Air Force Metrology Program Available Services



- Calibration and Repair at the AFPSL and 77 PMEL locations worldwide
- Technical consulting and engineering services
- Flexible metrology support concepts and engineering solutions incorporating best commercial practices
- System requirement review during all phases of acquisition to evaluate metrology related impact/risk
- Sustainment planning, support equipment evaluation/recommendations



Air Force Metrology

The Chain of Traceability



NIST



National Institute of Standards and Technology (NIST)

AFPSL



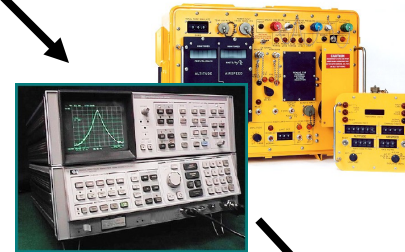
Air Force Primary Standards Laboratory (AFPSL)

Precision Measurement Equipment Laboratory (PMEL)



TYPE II
TYPE III

Support Equipment (SE)



AFMETCAL is the single point of contact for AF metrology

Weapon System





Air Force Metrology Program Preferred Support Strategy



- Organic Support via AF Precision Measurement Equipment Laboratory (PMEL)
- Organic Support via the Air Force Primary Standards Laboratory (AFPSL)
- Contractor Support via accredited source
- Contractor Support via ANSI-Z540 or ISO 17025 compliant source as approved by AFMETCAL
- References: AFI 21-113, TO 00-20-14



Air Force Metrology Program Contractor Managed SE



- When SE is managed through a contractor ICP employing commercial calibration sources, AFMETCAL loses visibility and is unable to ensure traceability and forecast requirements. (Applicable to both GFE and CFE.)

RISK

- System integrity compromised
- SE may not be supportable following reassignment
- Potential Life Cycle Cost increase when CLS occurs



Air Force Metrology Program Risk Reduction



- Engage AFMETCAL at earliest stage of SE acquisition or development
- Involve AFMETCAL in the contracting process
- Utilize a SERD process with formal response from stakeholders
- Partnership between contractor IMs and AFMETCAL requirements branch (SPO must participate in and foster this partnership)
- AFMETCAL involvement of ICP managed equipment